VOL. 7, No. 11 NOVEMBER 1953

CHRONICLE OF THE WORLD HEALTH ORGANIZATION

CONTENTS

Page

Increased production of antibiotics and insecticides 327
The WHO fellowships programme 333
The World Health Organization and medical librarianship . . 339
Turkey reinforces its tuberculosis-control services 343

Reports of Expert Groups

Plague 346
Undernutrition and malnutrition in mothers, infants, and children . . 346

Review of WHO Publications

Septic tanks 348

Reports from WHO Fellows

Public-health personnel in Great Britain, the Scandinavian countries, and the USA 349

Notes and News

Regional Committee for Europe meets in Copenhagen 351
Regional Committee for the Western Pacific holds fourth session . . . 352

SCHEDULE OF MEETINGS

19 October-7 November	**Committee on International Quarantine, first session, Geneva**
20 October-13 November	**Joints FAO/UNICEF/WHO Group Training Course on the Control of Milk Quality and Processing, Rome**
2-6 November	**FAO/WHO/Josiah Macy Foundation Meeting on Protein Malnutrition, Kingston, Jamaica**
2-14 November	**Seminar in the Caribbean Area on Brucellosis, Mexico, D.F.**
22 November-5 December	**Seminar on Mental Health, Beirut**
23 November-1 December	**Expert Committee on Onchocerciasis, first session, Mexico, D.F.**
30 November-4 December	**Expert Committee on Tuberculosis, sixth session, Copenhagen**
30 November-11 December	**Seminar on Reporting of Communicable Diseases in the Americas, Santiago**
7-11 December	**Expert Committee on Health Education of the Public, first session, Paris**
10-11 December	**International Antivenereal Diseases Commission of the Rhine**
14-15 December	**Technical Advisory Committee : Family Worker Study, London**

PRINTED IN SWITZERLAND

INCREASED PRODUCTION OF ANTIBIOTICS AND INSECTICIDES

A Venture in International Aid

In July 1953, WHO transferred to the United Nations Technical Assistance Administration the responsibility for aiding six countries in the production of antibiotics or insecticides. The event attracted no public notice, but it brought to a close one of the most daring and successful endeavours of the Organization. UNICEF, as well as WHO, played a part in this enterprise, which is increasing the availability of two products vitally important to public health. WHO/UNICEF assistance in the modernization or construction of antibiotics plants is making possible the production of sufficient penicillin to cure at least 2.5 million cases of syphilis a year, or many more cases of other diseases; and the DDT produced in WHO/UNICEF-aided plants will afford protection against malaria and other insect-borne diseases to approximately 25.5 million persons annually. This achievement is the culmination of three years' work on the part of WHO, and has meant an expenditure of more than six million dollars by the governments of the countries concerned, UNICEF, and WHO.

There were more requests for aid than could be met. The Organization established certain criteria for granting assistance to countries in the production of antibiotics and insecticides. Specifically, to qualify for assistance a country had to be able to show that :

(1) there were available in the country personnel of a type which could be trained for work in antibiotics and insecticides production;

(2) it would match the financial value of the equipment donated;

(3) it could make satisfactory use of the products of the plant in relation to national health needs—the production had to be devoted to public-health needs;

(4) it would accept guidance from WHO as to process methods and keep the plant open for visits by WHO experts and for the training of Fellows from other countries.

Antibiotics

The need for antibiotics far outstrips the supply. From a public-health viewpoint, the most urgent demand is in the treatment of venereal and treponemal diseases, particularly in mass control campaigns. For example,

in UNICEF/WHO treponemal-disease-control efforts in six widely separated countries, approximately 2 million of the estimated total of 5 million persons examined have been given penicillin treatment.

WHO became interested in the problem of antibiotics production in 1948, when it was a subject of discussion at the First World Health Assembly.[1] But it was the advent of the Technical Assistance programme, in 1950, that led to the initiation of actual aid.

For both financial and constitutional reasons, WHO aid had to be limited to technical advice and assistance. The Organization's work included :

(1) preparing plans for the buildings to house the actual plants;

(2) designing and blue-printing equipment for fermentation, extraction, compounding of clinical preparations, and filling and packaging;

(3) designing the necessary auxiliary services, i.e., water, steam, air, refrigeration, air conditioning, and effluent disposal;

(4) developing precise specifications for all items of equipment, with blue-prints giving quantitative and qualitative flow diagrams;

(5) preparation of details regarding essential raw materials;

(6) furnishing details of process requirements, covering fermentation and filtration, extraction, and purification, the preparation of clinical products, and all the laboratory procedures involved;

(7) preparation of detailed laboratory (both production and research) plans, together with laboratory equipment lists;

(8) providing reliable estimates of all costs; and

(9) maintaining overall technical guidance in the various phases by the provision of skilled personnel.

This work applied particularly to a plant constructed in India—the first antibiotics plant in all of South-East Asia. This plant, located at Poona (near Bombay), has been constructed in conformance with plans and blue-prints prepared by WHO experts and with the financial assistance of UNICEF and WHO. The Government of India, in addition to assuming the financial burden for buildings and services, is providing personnel to be trained.

The productive capacity of this plant was originally planned to be 400 billion international units of penicillin per month. However, the development of higher producing strains, together with other recent technological improvements to be utilized in the plant, will increase the anticipated production to more than 800 billion international units per month, with no increase in the size of the plant. In 1954, the first Indian-made, purified, and packaged penicillin will be available. In terms of the treatment of

[1] *Off. Rec. Wld Hlth Org.* 13, 155, 310

syphilis as recommended by the Expert Committee on Venereal Infections and Treponematoses, this production will mean that 1,875,000 cases may be cured annually.

Two countries have had WHO/UNICEF aid in improving the antibiotics production capacity of plants already in existence. In Yugoslavia, a small experimental plant built in 1946 was modernized and brought into full production. UNICEF allocated $90,000 for new equipment. The renovation of the plant has meant that production may be increased to as much as 100-150 billion international units of penicillin per month in late 1953. This will help meet Yugoslavia's needs for penicillin to combat endemic syphilis and other diseases, which necessitated the importation of 600 billion international units of this antibiotic in 1950. At the same time that this production has been achieved, much-needed local personnel has been given training, through fellowships, which will enable them to operate the plant and to do research.

The second country to benefit from UNICEF/WHO aid in improving antibiotics production facilities was Chile, which for some years has maintained an active interest in this production through its Instituto Bacteriologico de Chile. By 1951 Chile had a pilot plant which would produce 15 billion international units of penicillin per month, but this amounted to only 10% of the actual needs. Through UNICEF/WHO financial and technical aid, penicillin production will be increased, in 1954, to 150 billion international units of penicillin per month—enough to satisfy the nation's requirements as estimated in 1951.

Another aspect of WHO's aid in increasing the supplies of antibiotics is a training and research programme. Accordingly, the Organization has recognized as a research and training centre the Istituto Superiore di Sanità, Rome, to which Fellows are sent for training which will enable them to take part in work in their own countries. The Istituto has an antibiotics plant in production and can therefore provide actual operating experience for future technicians and research workers.

Insecticides

The availability of insecticides—DDT in particular—represents another public-health problem. The value of residual-action insecticides in fighting insect-borne diseases, malaria especially, has been more than proven in large-scale control projects in recent years.

As was the case with aid in the production of antibiotics, WHO was able to undertake actual operations in assisting in insecticides production only when Technical Assistance funds became available, and with UNICEF participation. In this instance, too, certain criteria had to be established for

granting aid to countries—aid in the form of construction of DDT production plants :

1. The recipient country had to be largely malarious.

2. It had to have within reasonable accessibility the essential raw materials for the production of DDT, or to undertake to make them available.

3. It had to have a sound antimalaria programme already in operation.

4. The government had to make financial commitments similar to those for recipients of aid in respect to antibiotics production.

The recipient country agreed to (*a*) assume responsibility for all capital costs except for imported equipment for the DDT plant; (*b*) operate the plant on a non-profit basis; (*c*) ensure the use of the product for public-health work; and (*d*) accept candidates from other countries for training in insecticides production.

Following surveys made in countries requesting aid, four countries were designated to receive technical assistance through the provision of DDT plants : Ceylon, Egypt, India, and Pakistan. All of the plants which were planned for these countries, under the auspices of WHO/UNICEF, are basically the same. When in full production, each will produce 2 tons of 100% technical DDT a day, or 700 tons a year. Some idea of what this may mean can be gained from the fact that, as recently as three years ago, Pakistan imported only 37.5 tons of DDT annually.

Ceylon

Malaria is a major public-health problem in Ceylon. Before the introduction, in 1945, of DDT as the basis for antimalaria campaigns, one out of three, if not every second person, suffered from this disease; control efforts have brought this figure down to one person out of every twelve. The achievements of the insect-control programme in Ceylon are also reflected in a reduction in infant mortality from 141 to 87 per 1,000 in the period 1946-9, in maternal mortality from 15.5 to 6.5 per 1,000 live births, and in the national death-rate from 22.7 to 12.6 per 1,000 inhabitants per year. Much of this accomplishment may be attributed to the use of DDT, of which 500-600 tons were imported annually.

Because of the obvious need for DDT, the Government's already noteworthy achievements in combating malaria, and its ability to meet the criteria agreed upon by UNICEF and WHO, Ceylon was approved as a recipient for aid in DDT production in the spring of 1951. The Government undertook to make a single major investment which, though considerable, would eventually mean a saving, since the importation of even an insufficient quantity of DDT entailed an annual expenditure of an equal, if not greater, amount.

It is not expected that the plant will be in operation before 1955. This time-lag is necessitated by the period required for the Government to install related industries, such as a caustic soda plant to supply chlorine, an essential ingredient. By that year, however, the combined efforts of the Government, UNICEF, and WHO will have assured the ultimate control—perhaps even eradication—of malaria in Ceylon.

Egypt

Insect control is a serious problem in Egypt, not only because of malaria, but also because of numerous other insect-borne diseases—trachoma, the enteric fevers, relapsing fever, typhus, and others. Furthermore, the public-health problems of Egypt are of concern to other nations because of its close proximity to three continents and because of the constant stream of travellers passing through the country.

When the Government applied for WHO/UNICEF aid in DDT production, it had already undertaken DDT-spraying operations and had developed a five-year programme for the unification of insect-control measures, calling for more than 2,000 tons of technical DDT per year. During the period 1947-51, more than 300 tons of DDT and 100 tons of Gammexane had been imported, but the Government was in no position to expand this effort, which would have to be continued at the same level if the progress achieved was to be maintained. It was found that the total cost of producing DDT in Egypt would be less than the price of imported DDT alone, not to mention shipping charges. For these reasons, WHO/UNICEF aid in the construction of a DDT plant was agreed upon.

The site chosen for the plant was Kafr-El-Zayat, which is approximately midway between Cairo and Alexandria, on the Nile, and adjacent to excellent rail connexions. Local producing plants will provide the necessary raw materials, except for benzene, which the Government has undertaken to import until national possibilities can be developed. With comparatively little international assistance, Egypt will, by the spring of 1954, have locally produced DDT in a quantity sufficient to protect more than half its population against insect-borne diseases.

India

In India the efficacy of DDT in malaria control has been well demonstrated. In the Dharwar and Kanara districts of the State of Bombay, for example, DDT spraying over a period of five years cut the incidence of malaria by nearly 90%. In the spraying season of 1950-1, India was able to import up to about 750 tons of DDT, but this amount was quite insufficient to meet the annual needs of the country—estimated by WHO experts at approximately 10,000-15,000 tons.

WHO and UNICEF decided to grant aid to India in constructing a DDT plant to help to meet this enormous need and to provide a training ground for both Indian technicians and others from abroad. On the recommendation of WHO, New Delhi was selected as the most suitable site, largely because of the accessibility of the basic raw materials. Here, with relatively little international technical assistance, India will have production facilities of its own and will be able to train national personnel withotu outside assistance should the operation be enlarged.

Pakistan

By conservative estimates, 25 million people out of a total population of 80 million suffer from malaria annually in Pakistan. Since Pakistan already had an antimalaria programme in progress and agreed to meet other WHO and UNICEF conditions, aid in constructing a DDT plant was granted.

To meet the requirement with regard to availability of raw materials, the Government of Pakistan is erecting a caustic soda plant, assuring an ample supply of chlorine and providing steam needed in DDT production. Other raw materials are being made available from various sources for the present, but they may eventually be provided at the site of the DDT plant as a chemical industry develops. All this represents a considerable outlay of money for the Government—the soda and chlorine plant alone is costing the equivalent of $1,500,000. This expenditure means, however, that with international aid a DDT plant will be constructed which, in 1954, will be producing enough DDT to protect more than six million persons from malaria.

* * *

The venture here described involved a total expenditure on the part of WHO of only $209,633 over a three-year period (1950-3). However, the proposals submitted by governments and developed by WHO have been aided by UNICEF contributions of $2,225,000, while the six governments have committed approximately $3,973,000. The results of this combined effort will have far-reaching effects on public health, not only because of the increased availability of essential products, but also because of the training facilities which the antibiotics and DDT plants will provide for technicians from a number of countries.

WHO Seals Available

World Health seals for 1954 are now available and, if desired for distribution in time for World Health Day (7 April 1954), should be requested from the Organization by 1 November 1953.

THE WHO FELLOWSHIPS PROGRAMME

For more than six years the World Health Organization has been carrying on a fellowships programme.[1] A total of 2,855 fellowships had been granted as at 31 December 1952 (40% being in 1952). The Fellows came from 115 countries and territories; 79 countries and territories offered facilities for their training. The maps in fig. 1 show their distribution by country of origin and country of study. Future expectations for the programme are shown by the monies budgeted for 1954, which are estimated at a total of $2,912,867 ($931,451 from the regular budget of WHO).

What Is Meant by WHO Fellowships

A fellowship means the acceptance by WHO of an individual, on the recommendation of his government,[2] as a person who, given the opportunity to study abroad, will increasingly contribute towards furthering the objectives of his government and of WHO, i.e., the attainment by all peoples of the highest possible level of health. The award of a fellowship by WHO implies providing the Fellow with the financial means required for advanced studies abroad and making the necessary arrangements with the most appropriate institutions.

A decision of the Sixth World Health Assembly makes it possible, under certain conditions, for individuals to be awarded fellowships in order to study not abroad but in their own country. However, this is only an exception to the rule—an exception easily understood when it is added that, instead of having the Fellows go abroad to find the experts, the latter come to the Fellows' country and participate in the organization of national courses. It is planned thus to promote the establishment of needed permanent training courses within the country itself.

Who the Fellows Are

Practically all those to whom WHO fellowships are awarded are professional people, mostly physicians (2,044, or 72%), nurses (313, or 11%), and sanitarians (176, or 6%), with a few from other allied professions (322, or 11%). In the great majority, they are men (2,260, or 79%). Most of the Fellows are about 40 years old (–25 : 134, or 5%; 25–34: 746, or 26%; 35–44 : 1,061, or 37%; 45–54 : 649, or 23%; 55+ : 177, or 6%;

[1] For procedural details concerning the fellowships programme, see : World Health Organization (1953) *WHO fellowships, an information booklet*, Geneva

[2] All applications for fellowships are made on a WHO form, signed by the candidate and his government, and including guarantees for post-fellowship service. Applications and information on fellowships are provided by the national health administrations of the countries.

undetermined : 88, or 3%). They are persons of experience in the fields they wish to study further abroad, often professors in universities and directors of services. However, in a few exceptional cases (91 awards, or 3%) the Fellows are very young persons who are intended to form the nuclei of professional personnel in their own countries, which lack appropriate training facilities,[3] the fellowships in such cases being awarded for undergraduate studies in medicine and allied professions.

Subjects of Study

As is to be expected, the great majority of the Fellows (85%) study various aspects of public health and preventive medicine, while some study clinical subjects (12%) and basic medical sciences and medical education (3%). To those studying public health and preventive medicine belong the Fellows who study public-health administration (10%), sanitation (7%), nursing (7%), maternal and child health (10%), and communicable diseases (28%). Other health subjects—such as mental health, occupational health, nutrition, health education of the public, rehabilitation of the handicapped, dental hygiene, etc.—account for the rest (22%). These different subjects of study are, in general, related to the various projects in which WHO is assisting the governments.

Purpose of the Fellowships Programme

It may be said that the main purpose of the fellowships programme is to assist selected health personnel from the countries concerned to obtain first-hand knowledge or experience abroad which would be applicable in developing improved standards in the medical and health services and the teaching institutions of their own countries. However, there are three other by-products of the fellowships programme which cannot be ignored; these are international understanding, international exchange of scientific information, and promotion of teaching facilities.

It was the Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel which, at its first session, in February 1950,[4] stated that the fellowships programme " . . . is rightly considered one of the most valuable means of promoting international understanding and of developing improved medical and health standards of all nations ". The Executive Board in a recent study[5] referred to the development of " a network of former Fellows for the dissemination of scientific information ". Some details concerning the promotion of teaching facilities are to be found in the following section.

[3] See, for example, *Bull. Wld Hlth Org.* 1952, **6**, 351.
[4] *Wld Hlth Org. techn. Rep. Ser.* 1950, **22**, 14
[5] *Off. Rec. Wld Hlth Org.* **46**, 144

FIG. 1. WHO FELLOWSHIPS, 1947-52 — I

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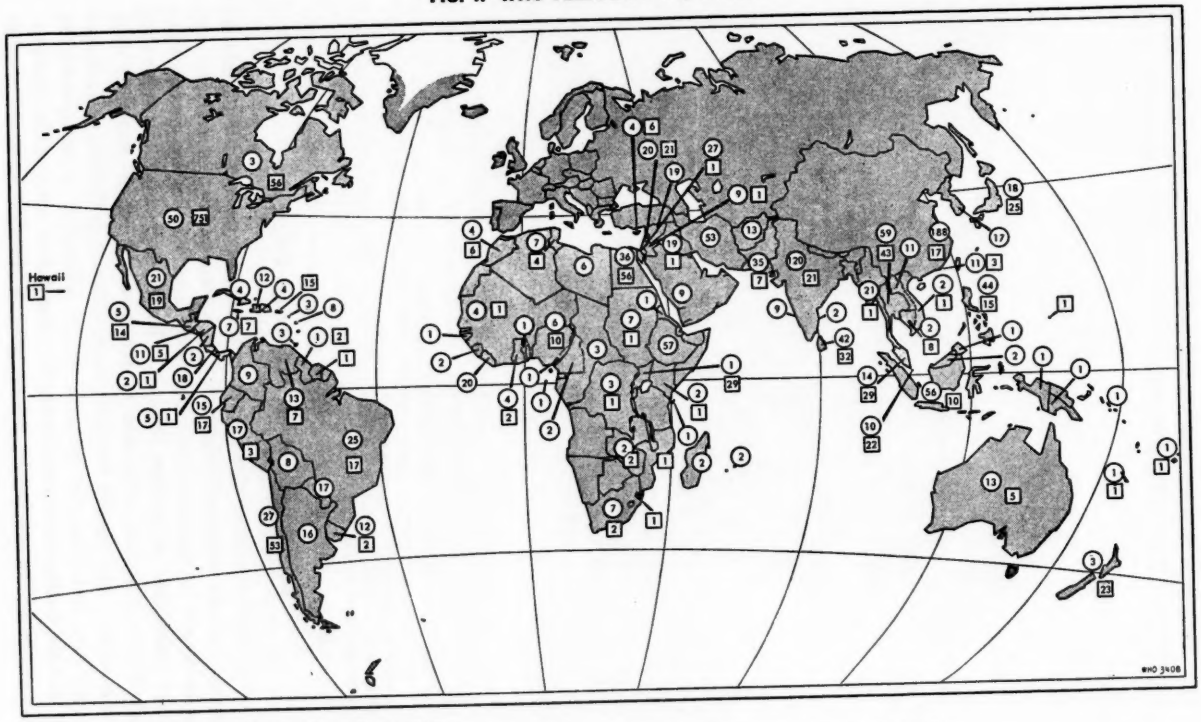
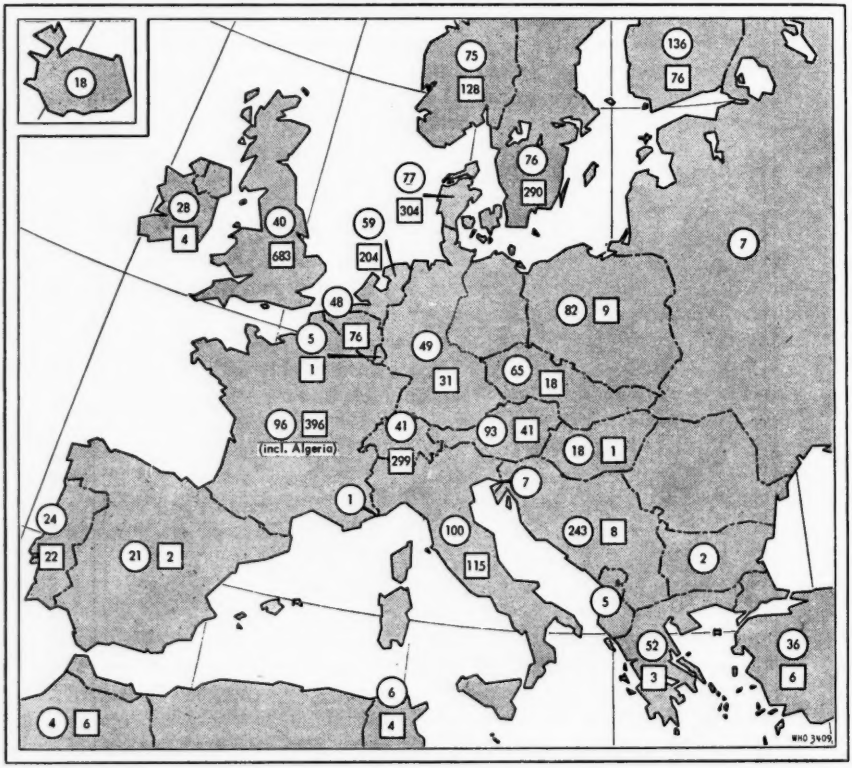


○ Number of Fellows originating from the country
□ Number of Fellows received for study visits (Note : The same Fellow may visit more than one country of study.)

FIG. 1. WHO FELLOWSHIPS, 1947-52 — II



○ Number of Fellows originating from the country
□ Number of Fellows received for study visits (Note : The same Fellow may visit more than one country of study.)

Achievements of the Fellowships Programme

In order to evaluate the programme, an attempt has been made to keep in contact with the Fellows for two years after they return home and to obtain, at the end of that period, reports from the governments on the utilization of former Fellows. The number of fellowships thus studied is too limited to permit of the presentation of statistical data at this stage. The figures available tend to show, however, that, except in very rare instances, the purpose of the fellowship is being achieved and that the Fellows are contributing in a number of ways to the strengthening of the health services of their countries. Impressive is the propor-

tion of Fellows who are active in personnel training programmes, thus passing on to others what they have acquired during their studies abroad. Reference is made elsewhere to the possible influence of fellowships in promoting the establishment of training facilities, courses, etc. Some of the courses have features of permanency, such as a one-year anaesthesiology course in Copenhagen, and a one-year antibiotics course in Rome, both running for a number of years. Others are non-recurring. A total of 874 fellowships, or 31%, have been granted for attending the scores of courses and similar group-training programmes organized wholly or in part by WHO or assisted by it. WHO contributes to the promotion of such training programmes by securing an adequate number of enrolments from all parts of the world, paying tuition fees for attending Fellows, or assisting with personnel.

Problems of the Fellowships Programme

There are three major difficulties besetting the fellowships programme, apart from the purely administrative ones.

First and foremost is the proper selection of the candidate by the requesting government. The selection covers such matters as professional qualifications for the proposed studies, adequate knowledge of the language in which the Fellow will study, personality of the Fellow—who, in a way, is an unofficial representative of his country and his countrymen——and clear understanding as to exactly what the Fellow is going to do when he returns home and, therefore, on what he should concentrate during his studies.

The second difficulty refers to study arrangements : arranging a programme appropriate to the Fellow's background and to his future work; selecting the most suitable country and institution(s); securing a place for the Fellow in institutions and with leading persons hard pressed for time and available facilities. There is also the question of providing for someone to visit the Fellow during his studies, in order to discuss his problems, aid him in his difficulties, and assist in making necessary readjustments in his programme.

The third difficulty arises when the Fellow returns home, at the end of his studies. Is he given the job for which he has been preparing ? Does he get support in his endeavours to improve the job he was doing in the light of what he has seen during his fellowship studies ? Can he make the necessary personal adjustments and adapt foreign ideas and methods to the conditions of his country ? Can he overcome resistance to new ideas and influence and teach others ? Some of these questions are obviously linked with proper selection.

These difficulties, and others, are very serious for the success of the Fellows and of the fellowships programme. If they are usually overcome, it

is because of the attention paid to fellowships by the requesting governments, the quality of the Fellows, and the wholehearted co-operation of the countries of study, their institutions and their personnel.

Conclusion

A substantial part of the funds devoted to assistance to governments for strengthening their health services is used for fellowships. Fellowships are a means of assistance highly appreciated by the countries and more widely used than any other. The data so far gathered seem to confirm the prevailing opinion as to the value of the fellowships. The evaluation, however, is strongly subjective. It may be appropriate to quote here the statement made by Mr. Chester I. Barnard, President of the Rockefeller Foundation, which has more than a third of a century's experience in this field :

" Fellowships are uncontrolled experiments in the sense that the kind of record that might have been established without the fellowship remains unknown. Since the aim initially is to choose outstanding individuals, it is safe to assume that many of these young persons would have had distinguished careers even without the help of a fellowship. It would therefore be wholly unwarranted to credit to the fellowship itself the proud record made by scores upon scores of Rockefeller Foundation fellows. Fellowship holders themselves affirm, however, that the fellowship experience, wisely planned and coming at a crucial developmental juncture, can contribute significantly to future achievement." [6]

[6] The Rockefeller Foundation (1951) *Directory of fellowship awards, 1917-1950*, New York, p. XI

Technical Assistance through Provision of Personnel and Fellowships

WHO fellowships awarded under the Technical Assistance programme numbered 555 in the period from the beginning of 1951 to July 1953, the awards by year being : 1951 - 85; 1952 - 371; and 1953, to 30 June - 99. The Fellows were from 71 countries, and their studies were arranged for in 34 countries.

With regard to technical personnel provided by WHO under the Technical Assistance programme, the total number at the end of July 1953 was 472—147 being assigned in 1951, 220 in 1952, and 105 during the first seven months of 1953. Forty-two countries and territories were represented by these staff members, and in 1952 the governments of 49 countries were assisted in their programmes of technical assistance for economic development.

THE WORLD HEALTH ORGANIZATION AND MEDICAL LIBRARIANSHIP *

The place of medical library services in the work of WHO is still in the experimental stage. The service so far developed has tended, for obvious reasons, to face inwards, and to have concentrated on the essential, and at the same time easier, task of providing the WHO specialist with what he requires. This may meet the needs of WHO, but it does not go far to meet the needs of the world for rapid, easy, and economical access to the knowledge available in medical and scientific literature. Experience, however, has shown that the problems of medical documentation are confused, that they are not susceptible to easy solution, that they vary from one country to another, and that the solution for one country is usually not applicable to another. The difficulties which arise are sometimes the result not of an absolute lack of medical literature, but of the means of easy access to what is already available. In some areas old attitudes to libraries may have to change before any major developments in medical library services can be expected. However, a start has been made; and there are good prospects for the further development of medical library and documentation services, the importance of which WHO fully recognizes in the strengthening of national health institutions and administrations.

Supply of Medical Literature

The Second World War created impassable barriers to the general exchange and supply of medical literature; and part of the medical relief programme of UNRRA was devoted to the assistance of medical libraries in war-devastated areas. During the two years intervening between the signing of the WHO Constitution and of its coming into effect, the Interim Commission took over UNRRA's work for the health rehabilitation of 13 UNRRA-aided countries, and the supply of medical literature has continued, under certain specific conditions, to form part of WHO's normal programme.

Thus, since its inception, WHO has provided considerable quantities of medical literature to Member Governments for the libraries of medical and health institutions, especially those concerned with the education and training of professional, technical, and other public-health personnel. By the end of 1952, WHO had supplied over 30,000 books and nearly 11,000 periodicals subscriptions, as well as many hundreds of reprints, photostats, and microfilms. These have assisted in replacing collections destroyed or damaged during the war, in rehabilitating inadequate or outdated libraries, and in furnishing nuclear collections to countries where standards of

* Based on an address by the Chief of the Library and Reference Section of WHO to the First International Congress on Medical Librarianship, London, 20-25 July 1953, which will appear in full in *Libri*.

medical education and of health services are below average. They have served, too, to keep up to date in basic foreign medical literature libraries in those countries with very limited funds to spend in external purchases.

The WHO Library

The necessity for a library was recognized in December 1946 in the earliest days of the Organization, and since its establishment the WHO library has grown rapidly. Today, thanks in part to the inheritance of the library of the Office International d'Hygiène Publique, it contains over 30,000 volumes, in addition to a very large collection of reprints, official documents, and government reports. Although a representative collection is maintained of modern works in several languages on all branches of medicine, special emphasis is naturally placed on public health (including nursing, veterinary, nutritional, and mental-health aspects), environmental sanitation, communicable diseases, and therapeutic substances. Over 1,600 current periodicals are received, about 1,000 being in exchange for WHO publications. A list of these is issued annually.

One technical problem which had occupied the library since its inception —that of classification—was resolved only last year. Several well-known medical classification schemes were examined; all had their advantages and disadvantages, and it was decided that the Barnard system, designed as it is particularly for a public-health library, best met the requirements of WHO.

The international character of WHO's work demands a library staff not only trained in medical librarianship but also representative of as large a number as possible of nationalities and languages. Thus, the staff of 18, nine of whom are trained librarians, includes American, Belgian, British, Costa Rican, Dutch, French, Greek, Norwegian, Polish, and Swiss workers; and the most important languages of medical publication are adequately covered.

The functions and responsibilities of the WHO Library and Reference Section are much wider than those of a normal library service. WHO is now a fully regionalized organization and, in addition to its Headquarters and the European Regional Office in Geneva, has Regional Offices in Alexandria, Brazzaville, Manila, Washington, and New Delhi, as well as teams working in remote areas all over the world. This regionalization has inevitably presented the library service with a number of problems.

The library is expected to provide this scattered Secretariat with the comprehensive medical documentation service which is essential for the efficient execution of their technical duties, and, on request, to extend this service to the health departments and institutions of WHO Member Governments. Furthermore, the library is responsible for advising upon, and for procuring, medical literature supplied to WHO Member Governments, Regional Offices, and field teams. Finally, it is expected to give WHO

Member Governments advice concerning their particular requirements for the adequate development of medical library services, especially in conjunction with long-term WHO plans for strengthening national health institutions and administrations.

Problems of Medical Documentation

The problems of the bibliographical control of current medical literature have been of international concern for a number of years, and WHO participated, together with UNESCO, in the work of the Co-ordinating Committee for Abstracting and Indexing in the Medical and Biological Sciences during its four years of existence. The committee's main concern was with problems of coverage and duplication in the principal medical and biological abstracting services, and it must be frankly admitted that its efforts to promote co-operation and co-ordination did not meet with the success they deserved. The interests of this committee have now been taken up by the Council for the International Organizations of Medical Sciences, and a meeting was held in Geneva in August 1953, with representatives of UNESCO and WHO, and invited independent experts to consider what international action might advantageously be taken in this difficult subject.

In addition, however, to problems of coverage and duplication of effort, there is that of information on available sources, for not all the existing medico-bibliographical sources are sufficiently known or are used to their fullest extent. In an attempt to remedy this and to bring them fully to the attention of the WHO staff, WHO has recently issued in mimeographed form a bilingual (English-French) guide to the indexing and abstracting journals in the medical and allied sciences available in the WHO library. This is an alphabetical list of titles, with a subject index, giving detailed information as to publisher, price, periodicity, date first issued, coverage, number of entries or abstracts published annually, number of periodicals regularly indexed or abstracted, etc. Although this is intended primarily for WHO internal use, copies may be supplied, on request, to any medical or university library.

Development of Medical Library Services

While the supply of current medical literature is an indispensable aid to the development of health services, it cannot, however, make its full contribution in the absence of adequate medical library services staffed by trained professional librarians. That WHO recognizes its responsibilities to assist in the formation of medical librarians is shown by the grant of fellowships to medical librarians to study outside their own country. Eleven

such fellowships have already been awarded, and seven of the Fellows have spent a portion of their period of study working in the WHO library.

Another important development was the appointment in January 1952 of a medical library consultant to the WHO Regional Office for Europe to survey and report upon medical library services in certain European countries, with special emphasis on the encouragement of central medical library organization and the elimination of unnecessary overlapping and duplication.[2] Study visits were made to six countries in 1952—Austria, Finland, Greece, Norway, Sweden, and Yugoslavia. Plans have been made for holding a European seminar for medical librarians in 1955, designed primarily to meet the needs of those who are in posts of responsibility in European medical libraries but who have not had adequate library training. As considerable preparation will be necessary for the successful organization of this seminar, a small ad hoc advisory committee met in Geneva in July 1953.

Other WHO Regional Offices may decide to follow the example set by the European Office and to survey medical library facilities within their area and within each country in the area, with a view to encouraging the development of at least one adequate medical library. WHO can play an important part in the development of such central libraries by providing the services and advice of consultants, by the award of fellowships, and by the organization of regional seminars and of assistance from the WHO library in Geneva. The central medical library in each country would be expected to provide advice and services to other medical libraries and to take the initiative in establishing a union catalogue of periodicals and a system of inter-library co-operation in acquisitions and loans.

[2] A full account of the medical literature programme of the WHO Regional Office for Europe is to be found in the *UNESCO Bulletin for Libraries*, 1953, 7, E73.

Corrigenda to International Pharmacopoeia

Corrigenda to volume I of the *Pharmacopoea Internationalis* have been issued and are available, free of charge, upon request to the World Health Organization, Palais des Nations, Geneva.

TURKEY REINFORCES ITS TUBERCULOSIS-CONTROL SERVICES

The real and lasting efficacy of the technical assistance given to a country by an international organization cannot be assessed until some months after the departure of the teams of experts who temporarily assume direction of the work. The value of the international collaboration is not to be judged so much by the actual accomplishments of the experts during their stay in a country as by the subsequent activities and concrete achievements following their departure but resulting from their work.

Dr. Etienne Berthet, who for two years (from May 1950 to May 1952) directed the WHO tuberculosis-control team in Turkey, visited the country again ten months after he had left it. He found that the work begun during his sojourn there had been not only continued but also intensified, and that there had been no slackening of the efforts of the Turkish Government and the private antituberculosis associations. There follow extracts from a report which he submitted to WHO following his visit to Turkey.

Activities of the Istanbul Tuberculosis-Control Demonstration and Training Centre

Since the departure of the international specialists, the Istanbul Tuberculosis-Control Demonstration and Training Centre has been under the direction of Professor Tewfik Saglam. Three Turkish phthisiologists work at the Centre full time, and the laboratory is headed by a Turkish professor. A French Red Cross nurse, engaged by the Istanbul Antituberculosis League, has assumed charge of the team of Turkish nurses working at the Centre and is continuing their training. Two X-ray technicians, a laboratory assistant, and medical secretaries complete the staff of the Centre.

Training of personnel

The training of medical and auxiliary personnel for work in tuberculosis control remains one of the major objects of the Istanbul Centre. Training courses on the medico-social aspects of tuberculosis are being continued. Three complete courses have been organized—in May-June 1952, October-November 1952, and May 1953; four courses had previously been given.

Twice a week, patients are presented as subjects for clinical, radiological, and therapeutic discussions, and these sessions are open to all Turkish physicians who wish to improve their knowledge of tuberculosis. Each month there are meetings of clinic physicians and visiting nurses to consider technical and professional questions. Practical training in clinics, home visiting, and social services are arranged regularly for Istanbul nurses and student-nurses. Instruction in the prevention of tuberculosis is given,

particularly to health-officer medical auxiliaries who have had three years of medical study and who are responsible, in the villages, for the control of infectious diseases, by vaccinations, disinfection, etc. They are now required to do practical work for thirty days at the Centre.

Finally, the Centre's library is being improved; the number of works in foreign languages is steadily increasing.

Medico-social activities

The medico-social activity of the Centre is continuing regularly. To give an idea of the work during the last seven months of 1952, the following figures are cited :

1. In the epidemiological service, 16,434 X-rays were taken; Mantoux (5 TU) tests numbered 7,688, of which 1,004 gave negative results and were followed by BCG vaccination.

2. There were 4,008 consultations at the Centre's antituberculosis clinic; 399 new cases of tuberculosis were diagnosed; and 498 home visits were made.

Development of Tuberculosis Control in Turkey

Dr. Berthet had interviews with the Minister of Health and with various other persons conversant with tuberculosis-control activities throughout Turkey. He gives some examples of results achieved.

Improvement of health facilities

As a result of the Turkish Government's efforts, the number of beds reserved for tuberculosis patients has considerably increased during the past few years :

Year	*Number of beds*
1939	400
1945	600
1949	1,100
1950	2,000
1951	4,100
1952	5,300
1953	6,300

At the same time, the number of tuberculosis-control clinics rose from 40 in 1951 to 61 in 1952. Of the latter number, 24 are State clinics and 37 belong to private organizations.

BCG vaccination

A campaign, organized with the collaboration of WHO and UNICEF, began in January 1953. Twenty teams, of which one is international, are

at work. The following figures give an idea of the extent to which BCG vaccination has been carried out in Turkey since 1949 :

Year	*Tests*	*Vaccinations*
1949	59,430	11,528
1950	158,104	57,570
1951	427,836	165,102
1952	496,362	194,833

First Turkish Tuberculosis Congress

A concrete result of the activities undertaken by the Turkish Government for the control of tuberculosis was the organization, in Istanbul, of the first Turkish tuberculosis congress, which was held at the University from 25 to 27 February 1953. More than two hundred physicians attended the various meetings; 66 papers were presented—dealing, in particular, with the medico-social, prophylactic, and therapeutic aspects of tuberculosis. Dr. Berthet, who represented WHO, gave a report entitled " Present trends in tuberculosis control in the countries of the Middle East ".

Future Plans

The Istanbul Tuberculosis-Control Demonstration and Training Centre is to extend its medico-social activities in the fields of rehabilitation, protection of children against tuberculosis, and health education of the public. Its premises are to be enlarged; it will in future occupy six floors.

It is the Government's intention to continue the untiring efforts which have given such satisfactory initial results. In addition, it wishes to strengthen its relations with neighbouring countries, Greece and Yugoslavia particularly. The Istanbul Centre is ready to welcome Fellows from these countries for training courses, and an exchange of professors among the different universities is envisaged.

Disease Classification Centre Transferred

The WHO Centre for Classification of Diseases has been transferred from Southport to London, England. This move, however, does not change the address, which remains : WHO Centre for Classification of Diseases, General Register Office, Somerset House, London, W. C. 2, England.

This centre was established in accordance with a decision of the Third World Health Assembly to carry out practical studies in the application of the International Statistical Classification of Diseases, Injuries, and Causes of Death. Since 1 January 1953, it has been headed by Dr. W. P. D. Logan, Chief Statistician (Medical) of the General Register Office, England.

Reports of Expert Groups

PLAGUE

Recent scientific advances have greatly increased the available means of plague control. The sulfonamides and antibiotics, new rodenticides, and more effective pulicides have led to rapid progress in the treatment and the prevention of this disease, in the protection of contacts, in the extermination of rats, and in flea control.

The second report of the Expert Committee on Plague [1] summarizes in concise form the results of plague-control experience in recent years. In certain regions these results have been most impressive. The report also gives an account of surveys on the role of wild rodents in the transmission of plague, enumerates the procedures for distinguishing the plague bacillus from the pseudotuberculosis bacillus, and describes the basic methods for the laboratory diagnosis of the disease.

[1] *Wld Hlth Org. techn. Rep. Ser.* 1953, 74. 13 pages. Price : 9d., $0.10, or Sw. fr. 0.40. Published in English and in French.

UNDERNUTRITION AND MALNUTRITION IN MOTHERS, INFANTS, AND CHILDREN

The joint FAO/WHO Expert Committee on Nutrition held its third session in Fajara, the Gambia, from 28 November to 3 December 1952, immediately following a nutrition conference organized by the Commission for Technical Co-operation in Africa South of the Sahara.[1] Both sessions were concerned with malnutrition in mothers, infants, and children, the latter in Africa, and the former in the world in general.

In its report, which has recently been published in the Technical Report Series,[2] the committee differentiates between undernutrition, in which a calorie deficiency leads to a state of inanition, and protein malnutrition, which is described as " a state of ill health occurring where diets are habitually poor in protein, while they are more nearly adequate in calories ". The committee is particularly concerned with the latter. The report points out that " while undernutrition or hunger becomes clamorous and is easily recognized, there are varieties of malnutrition which are not necessarily associated with hunger and are not easily recognized as evidence of dietary

[1] See *Chron. Wld Hlth Org.* 1953, 7, 69.

[2] *Wld Hlth Org. techn. Rep. Ser.* 1953, 72. 30 pages. Price : 1/6., $0.20, or Sw. fr. 0.80. Published in English and in French.

deficiency ", and that, so long as general hunger is prevalent in an area, the more insidious malnutrition may escape recognition and treatment.

After reviewing various states of undernutrition and malnutrition, including kwashiorkor, the committee draws attention to the paucity of information available on these subjects and stresses the need for more knowledge concerning the clinical, biochemical, and pathological changes found in infants and children suffering from these states. Turning to the causes of under- and malnutrition, the report remarks on the inadequacy or fluctuation of food supplies in many underdeveloped countries, and indicates that in certain regions of the world the rapid increase in population has created the problem of producing enough food to meet the growing demands, to which a solution has been sought by increasing the production of foods which give a high calorie yield per hectare. Once introduced, these crops, because of the ease of their cultivation, tend to encroach on areas previously producing foods which are richer in protein. The high-calorie foods may satisfy hunger but may also lead to malnutrition.

There is no information on the extent of protein malnutrition, but there are reasonable indications that it is widespread among the general population of the tropics. Its treatment calls for the administration of a diet rich in protein, usually with a basis of powdered skim-milk.

There is evidence that milk, meat, eggs, fish, and pulses all have a preventive effect on protein malnutrition. The consumption of such foods by pregnant and lactating women would contribute to its prevention in infants and children, whose diet may also be supplemented by special food products such as " milk substitutes ", which may or may not look like milk but which resemble it in nutritive value. These special foods, the report points out, should be based on products locally available which can be processed in the village.

The practical application of programmes to improve nutrition is also considered in the report. It is pointed out that in many underdeveloped regions the main problem is to bridge the gap between the knowledge of the administrative authorities and technical services, on the one hand, and the contribution in wisdom, experience, and effort which can be made by the people themselves, on the other. Various lines on which field research, clinical and laboratory research, and investigations of the nutritive value of food could be conducted are suggested in a section of the report in which it is stated that the outstanding need is for scientific knowledge of protein requirements at various ages.

There are three annexes to the report : the first is a description of severe kwashiorkor; the second is a list of 39 different names that have been applied to protein malnutrition in various parts of the world; and the third is a note on food production and extension methods.

Review of WHO Publications

SEPTIC TANKS

The treatment and disposal of domestic sewage from small groups of houses or from isolated dwellings is a problem of wide interest and great concern in many countries. This problem was a subject of discussion at the Third European Seminar for Sanitary Engineers, held in London from 27 October to 1 November 1952.[1] A collection of some of the papers on this subject which were presented at the seminar and a summary of the discussions have recently been published in the WHO Monograph Series.[2]

Among the topics dealt with in this monograph are the factors governing sewage treatment in small sewage plants; principles of design for small sewage works; effect of treatment of domestic sewage in small plants on the counts of faecal bacteria and comparison with the results of treatment in large-scale sewage works; and a comparative study of septic tanks. The monograph is illustrated by sketches of plans and sections of various tanks and by photographs of plants in Great Britain. It contains, in addition to the articles and the discussion summary, a select bibliography on septic tanks and similar small sewage-treatment units.

The basic data and principles for the design and operation of the type of sewage installation described and the observations on maintenance given in the monograph could serve as a useful guide to local health departments, sanitary engineers, and others actively engaged in rural and urban sanitation in designing such units, and to national and provincial authorities who are considering revision of their regulations on sewage disposal.

[1] See *Chron. Wld Hlth Org.* 1953, 7, 18.

[2] World Health Organization (1953) *Design and operation of septic tanks*, Geneva (*World Health Organization : Monograph Series* No. 18). 124 pages. Price : 7/6, $1.50, or Sw. fr. 6.—. French edition in preparation

The Second International Standard for Penicillin

In 1950 the Department of Biological Standards, National Institute for Medical Research, London, was authorized by the WHO Expert Committee on Biological Standardization to prepare the Second International Standard for Penicillin. A report on this work, by J. H. Humphrey, M. V. Mussett, & W. L. M. Perry, has now been published.[1]

A single batch of specially recrystallized sodium penicillin G was obtained, and 11 laboratories in seven different countries were requested to take part in its collaborative assay. 112 assays were carried out, of which 101 were done by cup-plate methods using either *Staphylococcus aureus* or *Bacillus subtilis*. The results were subjected to standard methods of analysis, on the basis of which the authors define the Second International Standard for Penicillin as containing 1,670 International Units (IU) per mg, with limits of error ($P = 0.05$) of 1,666–1,674 IU/mg. The International Unit is therefore redefined as the activity contained in 0.0005988 mg of the Second International Standard for Penicillin.

[1] *Bull. Wld Hlth Org.* 1953, 9, 15

Reports from WHO Fellows

Many of the letters and reports received from WHO Fellows are of such interest that they deserve to be read by a wider public. They demonstrate more vividly than a series of facts and figures both the character of the fellowship programme and the response of the Fellows themselves. Selections from these reports are therefore published from time to time, but is must be emphasized that the opinions expressed are those of the Fellows.

Public-Health Personnel in Great Britain, the Scandinavian Countries, and the USA

Dr. G. Graham-Cumming, Senior Health Officer at Hong Kong, was granted a WHO fellowship to make a six-month tour of Denmark, Finland, Great Britain, Norway, Sweden, and the USA to study public-health administration and training. Part of his final report on his study-tour is summarized below.

Public-health officers

Dr. Graham-Cumming was surprised to find that, except in the United Kingdom, public-health posts are not generally filled by specialists, and that there is comparatively little public-health training offered in most of the countries which he visited. Scandinavia lacks not only health officers, but even physicians. In the USA there are many physicians, but they are badly distributed, and there is an acute shortage of qualified health officers. Special efforts are being made to interest young doctors in public health and to provide comprehensive training in this particular branch of medicine.

Public-health nurses

The situation with regard to public-health nurses seems to be better. Dr. Graham-Cumming noted in all the countries visited " a very high standard of training and selection on aptitude and character ". The training everywhere consists of one year of special postgraduate instruction plus field experience, with emphasis on " group dynamics " and the development of " personality with a view to leadership and education of the public ".

Particularly noteworthy is the Finnish school of nursing at Helsinki and the Finnish public-health nursing system. To quote Dr. Graham-Cumming : " There they demand and turn out an exceptionally high calibre of nurse in large numbers. The Finnish public-health programme hinges very largely on the public-health nurse. She often is the leading personality in a community and a most responsible person who must be capable of turning her hand to almost any kind of job. The Finnish public-health nurse is thus very thoroughly trained in all aspects of public health, social affairs, psychology, and even laboratory techniques, and is a most competent ' generalist '. The Finns, too, have the most thoroughly organized system of in-service conferences and systematic refresher training found anywhere. Of all the countries visited, Finland makes most use (and a quite exceptionally extensive and varied use, too) of this invaluable body of public-health personnel, provides the best facilities for them, and most systematically ensures that they are kept up to date and adequately supported. The Finnish law requires each local community to provide one public-health nurse per four thousand of population.

Nowhere else have I found anything like this provision, yet in Finland they aim at one nurse per two thousand of population, and it is very probable that they will achieve this ideal state of affairs in the not too distant future."

The ratio of public-health nurses to population in other countries varies considerably: in Hawaii, for example, it is about one to five thousand in the rural areas and about one per seven thousand in Honolulu; in England, the ratio is expressed in terms of births, with one nurse per seventy births per year being considered fairly satisfactory.

Concerning Denmark, Dr. Graham-Cumming wrote : " ... the public-health nurse has not come into her place in society. There are scarcely two hundred in the whole country, and even those are very imperfectly used. Considerable difficulty is being experienced in training them because of lack of opportunity for supervised field experience. This is one rather serious weakness in an otherwise very efficient and rather interesting health service."

At the University of California, in Los Angeles, USA, an experiment in nurses' training is being conducted. The students take a regular four-year academic course and do not " work their way through a hospital ". Instruction is given in the form of task projects, group discussions, and guided study rather than by formal lectures and other conventional means of teaching. The course covers every aspect of nursing, including public health; and the graduate is considered qualified for any nursing post anywhere.

Dr. Graham-Cumming observed considerable variation in the use made of the public-health nurse in the various countries which he visited : " In Finland, she does everything, including bedside care and social advising, blood examinations, and X-raying. In Denmark, she is confined to advising mothers of infants and to a little school nursing. In Norway and Sweden, she performs much the same function as in Finland, but usually one individual is not required to perform all functions. In England, there is wide variety in duties according to local needs. She is regarded as a family nurse but rarely gives actual bedside care. In some places she is the local midwife. The Danes, incidentally, have an excellent and highly trained midwifery service, which somewhat offsets the deficiencies in public-health nursing services... In America, practice again varies enormously. In some States, the public-health nurse is hardly used at all; in others, she is confined fairly strictly to child care. Elsewhere she may be used mainly as a tuberculosis nurse. Many serve as specialist school nurses only. California and Hawaii appear to make the greatest use of her as a generalist."

In concluding his observations on public-health nurses, Dr. Graham-Cumming expressed the view that " the public-health nurse is an indispensable unit in any really comprehensive health programme, and she should be a true generalist... Her main function, however, is health education ".

Other public-health personnel

Other personnel invaluable to public-health services whose role and training Dr. Graham-Cumming described in his report are the health educator, the social worker, the nutritionist, the dental hygienist, and the sanitarian, sanitary engineer, and sanitary inspector. He also noted with interest the use, particularly in the USA, of the lay, specially trained administrator in hospitals and clinics. Special praise was accorded to the health educator and to his role in public health in the USA : " One extremely interesting unit in the American health team is the health educator. These are personnel specially trained in the art of influencing people and getting results. Special courses are arranged for them at various schools of public health, and they do invaluable work. They relieve the health officer of a great deal of publicity work and develop wide and close contact with all and every kind of social group activity. Whereas the public-health nurse can do her best educational work in the home with families, and the medical officer can work through mass media such as the press, radio, and television, the health educator can reach and influence, in addition, small, active groups of civic-minded people and get

support and action otherwise lacking. ... No health team can really be complete without this type of personal relations publicity manager. He interprets the health department to the people and the people to the health department, and such work calls for very full-time work and special training."

* * *

In evaluating his study-tour and expressing his appreciation to WHO for having awarded him the fellowship which made it possible, Dr. Graham-Cumming wrote : "This tour has been most valuable from the point of view of expanding my general knowledge, making contacts, clearing up misconceptions, and gaining a clearer insight into other people's thinking and difficulties. ... I have picked up many useful hints and ideas...

"From the Danes I think I learnt a possible technique for introducing health insurance into Hong Kong gradually; from the Norwegians, an idea on how to solve some of our staffing problems; from Finland, some conception of how to organize and operate a public-health nursing service suitable for Hong Kong...; from England, I got important material on training health personnel; and from America, I got valuable ideas on mental hygiene and health education, many technical ideas, and a good deal of stimulation... in Sweden ...I picked up some valuable information on the research being done in epidemiology, particularly on virus infections in pregnancy, and some very interesting views on sociology...

"It was a great privilege to have been given this opportunity, and if I have failed to take proper advantage of it, the fault must be with me."

Notes and News

Regional Committee for Europe Meets in Copenhagen

Denmark was host to delegates from 22 countries at the third session of the WHO Regional Committee for Europe, held in Copenhagen from 7 to 10 September 1953. The Chairman of the committee was Dr. J. Frandsen, Director-General of the Danish National Health Service.

Among the major recommendations of the committee was that Geneva should become the permanent site of the Regional Office for Europe. This selection was made, by secret ballot, from a choice of five proposed sites : Copenhagen, Nice, Frankfurt on Main, the Hague, and Geneva.

A budget of approximately $1,600,000 was recommended by the committee for 1955 aid to health projects, training courses, and other activities in European countries. Part of this sum will come from the regular budget of the Organization, and the rest from United Nations Technical Assistance funds, UNICEF, and other agencies having joint programme arrangements with WHO.

General approval was given to the work already carried out through the Regional Office for Europe, minor adjustments in the plans for 1954 were made, and a programme for 1955 was discussed and approved. Particular attention in the plans for Europe was accorded to educational and training activities, such as conferences on various subjects (e.g., modern trends in tuberculosis control) and special studies of interest to many countries (e.g., on water standards, on teaching methods for nurses, and on sanitary engineering terminology in English and in French). An extensive fellowship programme was approved.

Despite the emphasis on education and training, however, almost a fifth of the total budget for 1955 will be devoted to the control of certain communicable diseases, such as tuberculosis (in Austria, Finland, and Turkey), diphtheria and whooping cough (in Yugoslavia), and trachoma (in Tunisia and Morocco).

The committee recommended that its two Associate Members, Tunisia and Morocco (French Protectorate), should be given full voting rights in its meetings.

An invitation to hold the 1955 session in Vienna was accepted, and a previous decision to meet in Yugoslavia in 1954 was confirmed.

Present at this session were delegates from Austria, Belgium, Denmark, Finland, France, Germany (Federal Republic), Iceland, Ireland, Italy, Luxembourg, Monaco, Morocco (French Protectorate), Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom, and Yugoslavia.

Regional Committee for the Western Pacific Holds Fourth Session

The WHO Regional Committee for the Western Pacific met for its fourth session, in Tokyo, from 3 to 8 September 1953. Dr. Takemune Soda, of Japan, was elected Chairman of the meeting.

During a detailed review of the accomplishments of the past year, with statements by representatives of the various countries concerning their health activities, attention was called to the lack of trained health personnel, one of the principal problems of the Region. The committee suggested that, in the coming year, encouragement be given to fellowships for study within the Western Pacific Region, wherever possible at institutions which have been given WHO assistance.

In considering the proposed programme and budget for 1955, the committee had to take into account a serious cut in Technical Assistance funds, which also necessitated a revision of the programme previously approved for 1954. Dr. I. C. Fang, Regional Director, urged Governments to try to increase their contributions to the Organization, stating that " WHO can have exactly the kind of programme for which its Member States are prepared to pay ". In view of the financial situation likely to be faced, the committee authorized the Regional Director to establish priorities in 1955 for projects of regional significance for which commitments have already been made, subject to the availability of funds, and to continue assistance in strengthening national health administrations and education and training programmes, relating both forms of assistance, in so far as possible, to regionwide disease-control activities. Other decisions relative to the programme made provision for technical advice and assistance in international aid to governments concerning the health problems of refugees, and for carrying out a regional survey of the extent of smallpox, in view of the Organization's proposed worldwide campaign against this disease.

The committee agreed that Associate Members (of which there are as yet none in the Western Pacific Region) should have full voting rights at Regional Committee meetings, but that such rights should be accompanied by an increased assessment of contribution to the WHO regular budget. It was further agreed that, in order to conserve funds for programme purposes, the travelling expenses of representatives of Member States to the committee meetings should be borne by the Member States, rather than by WHO.

The next meeting will be held in Manila, unless an invitation is received to hold the meeting elsewhere. In 1955 the committee will meet in Singapore.

The following countries were represented at this session of the Regional Committee for the Western Pacific : Australia, Cambodia, China (Taiwan), France, Japan, Netherlands, New Zealand, Philippines, Portugal, United Kingdom of Great Britain and Northern Ireland, USA, and Viet Nam.